

SHUMAKOVA, A.A., kand.sel'skokhozyaystvennykh nauk

Testing the reserve ("blue") spraying method in controlling apple  
scab. Trudy VIZR no.1:208-212 '48. (MIHA 11:7)  
(Apple scab) (Bordeaux mixture)

1. SHUMAKOVA, A. A., POLYAKOV, I. M.
2. USSR (600)
7. "Testing the Toxic Properties of the Fungus Deuterophoma tracheiphila Petri (The Causative Agent of 'Mal'secco' Disease of the Lemon)", Trudy Vsesoyuzn. In-ta Zashchity Rasteniy (Works of the All-Union Institute of Plant Protection), No 3, 1951, pp 165-175.
9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

1. SHUMAKOVA, A. A., POLYAKOV, I. M.
2. USSR (600)
7. "The Effectiveness of a Dinitroorthocresol Preparation in Fighting the Infectious Origin of Fungous Plant Diseases", Trudy Vsesoyuzn. In-ta Zashchity Rasteniy (Works of the All-Union Institute of Plant Protection), No 3, 1951, pp 178-190.
9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

1. STEPANOV, K. V., SHUMAKOVA, A.A.
2. USSR (600)
4. Lemon - Diseases and Pests
7. Periods of infection of lemons by infectious drying-back (mal secco). Dokl Ak sel'-khoz No. 11 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

SHUMAKOVA, A. A.

POLYAKOV (I. M.) & SHUMAKOVA (Mina A. A.). Накопление токсина при развитии гриба *Deuterophoma tracheiphila* Petri в различных условиях культивирования. [Toxin accumulation during the development of the fungus *Deuterophoma tracheiphila* Petri under different growing conditions.]— Докл. Акад. Сельскохоз. Наук Ленина. [Rep. Lenin Acad. agric. Sci.— Proc. Lenin Acad. agric. Sci.], 19, 3, pp. 43-48, 3 graphs, 1954.

Laboratory studies at the Pan-Soviet Scientific Research Institute [? Leningrad] on the influence of different temperatures and pH values of the medium on the citrus wilt fungus (*Deuterophoma tracheiphila*) [R.A.M., 33, p. 292 and preceding abstract], using strains No. 1 and No. 5, have shown that the development of the fungus and toxin formation occur over a wide range of temperature [cf. 30, p. 413] but hardly at all between 29° and 30° [C]. Toxin production was greatest between 21° and 24° and was much retarded in strain No. 1 and non-existent in strain No. 5 at low temperatures (-7°). The pH (from 4 to 7.8) of liquid media exerted an effect only during the first days of the experiment, both fungus development and toxin formation being less at an initial pH of 4. As the fungus grew the pH of the medium became more favourable to the fungus, finally (on the 30th day of the experiment) becoming stabilized at 6.6 to 6.8.

USSR/Plant: Diseases - Diseases of Cultivated Plants.

0-3

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30255

Author : Shumakova, A.A., Grube, A.M.

Inst Title : The Role of *Epicoccum granulatum* Penzig in the Infectious Citrus Dessimination Disease Mal Secco.

Orig Pub : Dokl. VASKhNIL, 1957, No 3, 33-39.

Abstract : Investigations of the citrus groves in Batumskiy Rayon have demonstrated that the wide spread of *E. granulatum* which was separated from plants of lemon, orange, tangerine and other citrus crops mainly inflicted with an infectious drying out of the leaves and branches. The fungus was most frequently encountered in the wood. Several biological peculiarities of *E. granulatum* were studied together with its interrelation to the fungus *Deuterophoma tracheiphila*. Growing lemon, tangerine and orange trees were artificially infected with the fungus.

Card 1/2

KOST, A.N.; SHUMAKOVA, A.A.; KOZLOVA, Ye.I.; GRANDBERG, I.I.

Reactions of hydrazine derivatives. Part 26: Fungicidal action  
of pyridazines and hydrazone. Vest.Mosk.un.Ser.mat., mekh.,  
astron., fiz., khim. 14 no.3:205-211 '59.  
(MIRA 13:5)

1. Kafedra organicheskoy khimii, kafedra mikrobiologii i  
laboratoriya fitotoksikologii Vsesoyuznogo instituta zashchity  
rasteniy.

(Hydrazone) (Pyridazine) (Fungicides)

SHIBKOV, A...., Land.-sel'skokhemy i tvernykh nauk

Fungicides - chemicals for the protection of plants from diseases,  
and ways of using them. Zhur. VNIIG 5 no. 3:285-292 '60.  
(MITI 14:2)

(Fungicides)

GALAKHOV, P.N.; SHUMAKOVA, A.A.; GOLOVNEV A., spets. red.;  
MEL'NIKOVA, M.S., red.

[New poisonous chemicals for protecting farm crops against  
pests and diseases] Novye iauokhimikaty (dlia zashchity  
sel'skokhoziaistvennykh kul'tur ot vreditelei i boleznei.  
n.p.) Vystavka dostizhenii narodnogo khoziaistva SSR  
(n.d.) 22 p. (MIRA 17:5)

SHUMAKOVA, A.A.

Characteristics of the manifestation of the infectious  
desiccation "mal secco" in lemon trees and its cause.

Trudy VIZR no.21:25-40 pt.2 '64.

(MIRA 18:12)

SHUMAKOVA, G.A.

U.

USSR/General Problems of Pathology - Immunity.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98086

Author : Gurvich, G.A. Shumakova, G.V.

Inst : -  
Title : Plasmocytic Reaction and Immunologic Regularity, Report I.

Orig Pub : Byul. eksperim. biol. i med., 1957, 44, No 10, 95-100.

Abstract : 0.1 ml (65Lf) of diphtheric adsorbed anatoxin was subcutaneously introduced into rabbits into right posterior calf on the 1st and 30th day of the experiment, with re-vaccination after 6-8 months, and, to guinea pigs, warmed paratyphoid Gaertner's vaccine (500 million microbe bodies) subcutaneously into the right leg on the 1st day, with doubled revaccination on the 60th and 65th day and later on 75th - 83rd days of the experiment. On various days, the titer of the antitoxin was determined and 2-3 animals were killed for cytologic investigation of spleen prints and right and left popliteal lymph nodes (LN).

Card 1/3

- 7 -

SHUMAKOVA, G.V.; VOROB'YEVA, V.A.

Relation of results of a Wessermann test to the drying temperature and storage conditions of sera. Lab.delo no.5:17-20 S-0  
'55. (MIRA 12:6)

1. Iz otdela eksperimental'noy patologii i immunologii ostrozareznykh infektsiy (zav. - prof.P.F.Zdrodovskiy) Instituta epidemiologii i mikrobiologii AMN SSSR i Tsentral'noy kliniko-diagnosticheskoy laboratorii gorzdrava (dir. - L.L.Dlugach), Moskva.  
(WASSERMANN REACTION,

eff. of temperature of drying & cond. of preserv.  
of sera on results)

SHUMAKOVA, G.V.

Effect of conditioned reflexes on the formation if diphtheria antitoxin. Zhur.mikrobiol.epid. i immun. no.9:25 S '55(MLRA 8:11)

(REFLEX, CONDITIONED,

eff. on diphtheria toxoid form. in animals)

(DIPHTHERIA,

toxoid, eff. of conditioned reflex on form. in animals)

GURVICH, G.A.; SHUMAKOVA, G.V.

Plasmocytic reaction and recurrent features in immunology. Report  
No.1. [with summary in English]. Biul.eksp.biol. i med. 14 no.10:  
94-100 O '57. (MIRA 11:2)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei (dir. -  
prof. S.N.Muromtsev) AMN SSSR, Moskva. Predstavlena deystvitel'nym  
chlenom AMN SSSR P.F.Zdrodovskim.

(VACCINES AND VACCINATION,

plasmocytic reactions in immun. responses (Rus))

(LUMPHOID TISSUE,  
same)

USSR / General Problems of Pathology, Immunity.

U

Abs Jour: Ref Zhur-Biol., No 22, 1958, 102392.

Author : Shumakova, G. V.

Inst : Not given.

Title : The Influence of Conditioned-Reflex Stimulation  
on the Production of Diphtherial Antitoxin.

Orig Pub: Zh. mikrobiol., epidemiol., i immunobiol., 1958,  
No 2, 121.

Abstract: In 12 rabbits, 12 combinations of a conditioned stimulus (the rabbit was placed into a box with vapors of spirit of camphor for 5-6 hours) and unconditioned stimulus (0.05 ml. diphtherial antitoxin) for the duration of 33 days turned out to be sufficient for development of a conditioned reflex. After 30 days of rest, the conditioned stimulus induced in rabbits an increase of the

Card 1/2

SHUMAKOVA, G.V.; GURVICH, G.A.

Plasmocytic reaction and immunological features. Report No.2: Immunological inhibition following the immunization of rabbits with tetanus anatoxin. Biul. eksp. biol. i med. 46 no.11:66-72 N '58. (MIRA 12:1)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR (cir. - doktor med. nauk S.N. Muromtsev). Predstavlena deystvitel'nym chlenom AMN SSSR P. F. Zdrodovskim.

(TETANUS, immunol..

cytol. reactions to anatoxin in rabbits (Rus))

19. *Leucosia* *leucostoma* (Fabricius) *leucostoma* (Fabricius)

"Inhalation and exhalation of air flow."

Report presented at the 13th All-Union Congress of Bolsheviks, Bolsheviks and Left-Socialists, 1927.

GURVICH, G.A., kand.med.nauk; SHUMAKOVA, G.V., kand.med.nauk

Immunological activity of the lymphoid organs and general regularities of immunogenesis. Vest.AMN SSSR 15 no.1:57-67 '60.  
(MIRA 13:6)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN  
SSSR.

(LYMPHATICS)  
(IMMUNOLOGY)

SHUMAKOVA, G.V.

Role of lymphoid organs in the formation of antitoxic immunity.  
Biul. eksp. biol. i med. 51 no.3:80-84 Mr '61. (MIRA 14:5)

l. Iz otdela rikketsiozov (zav. - deystvitel'nyy chlen AMN SSSR P.F. Zdrodovskiy) Otdeleiya gigiyeny, mikrobiologii i epidemiologii AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR P.F. Zdrodovskim.

(LYMPHOID TISSUE) (TOXINS AND ANTITOXINS)  
(ANTIGENS AND ANTIBODIES)

GURVICH, G.A.; ZIRODOWSKIZ, P.F.; SHUMAKOVA, G.V.; NOVIKOVA, I.K.

Endotoxins as nonspecific biostimulants of antibody formation.  
Vest. AMN SSSR. 19 no.8:50-61 '64. (MIRA 18:7)

I. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei  
AMN SSSR, Moskva.

SHUMAYKOVA, N.Y.; FRYAZINOVA, I.B.

Effect of deposition on the distribution of total antigen from  
Gartner's culture, labelled with carbon (C14). Zhur.mikrobiol.,  
epid. i immun. 42 no.28-13 F '65. (MIRA 13:6)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

YURINOV, K. I.

Volga-Don Canal Region - Rice

Rice cultivation with periodic irrigation in the irrigation zone of the Volga-Don Canal.  
Dost. sel'khoz. No. 9, 1952

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.

SHUMAKOVA, K.P.; SHVYDCHENKO, L.I., redaktor; GLOTOVA, M.I., tekhnicheskiy  
redaktor

[Growing rice with periodic floodings] Vozdelyvanie risa pri periodicheskikh polivakh. Rostov-na-Donu, Rostovskoe Kn-vo, 1954. 26 p.  
(Rice) (MLRA 10:1)

GLIKHOVY, P.Ye.; LEMESHEKO, N.I.; UYKHOVA, L.M.; SEMAKOVA,  
L.A.; ISHCHENKO, N.S.; TCHI, BELYAKOV, Z.V., red.  
[Anti-friction bearings of construction equipment and  
mechanized tractors; a handbook] Prisnispuki kacheniy  
stroitel'nykh mashin i mekhanizir vanyog instrumentov;  
spravochnik. Kiev, Bud'vell'nye, 1965. 217 s.  
(MIRA 3811)

1. Nauchno-issled vatel'skiy institut stroitel'nogo pro-  
izvodstva. Energi pair vskiy filial.

Z/011/62/019/010/003/009  
E112/E435

AUTHORS: Fadeyev, P.M., Zhigun, I.G., Shumakova, L.B.

TITLE: Waterproof paints, based on synthetic resins

PERIODICAL: Chemie a chemicka technologie. Prehled technicke a hospodarske literatury, v.19, no.10, 1962, 465, abstract Ch 62 6282. (Lakokras. Materialy, no.3, 1962, 50-51)

TEXT: Paints, based on straight resins, such as polystyrene or the epoxies, although waterproof are too brittle for practical application. The addition of bitumen reduces brittleness but causes deterioration of the resistance to both, low and elevated temperatures. The general usefulness of the resin composition is thus impaired. Best results were obtained with coats based on epoxies or polystyrene if plasticizers such as dibutylphthalate and titanium white, cement and other fillers were added. These compositions proved useful as insulating layers against humidity and water in the building trade. 3 tables.

[Abstracter's note: Complete translation.]

Card 1/1

ACC NR: AT6035120

(A)

SOURCE CODE: UR/2536/66/000/065/0086/0094

AUTHOR: Shumakova, L. S. (Engineer)

ORG: Aviation Technological Institute, Moscow (Aviationsnyy tekhnologicheskiy institut)

TITLE: The effect of stress concentrations on ultimate deformations in tension and bending

SOURCE: Moscow. Aviationsnyy tekhnologicheskiy institut. Trudy, no. 65, 1966. Novoye v tekhnologii shtampovki (Recent developments in stamping technology), 86-94

TOPIC TAGS: sheet metal, notch sensitivity, surface defect, stress concentration, tensile property, elongation, bending

ABSTRACT: The effect of surface defects in sheet metal on tensile elongation and minimum bending radius was studied. Scratches ranging from 0.05 to 0.15 mm in depth were scribed about 3 mm apart, perpendicular to the testing direction. The radius of the notches was either 0.02 or 0.07 mm, while the notch angle was a constant 60°. Tension testing was done on AK4-1 L1.5, D16A-T, L1.5, and VAD23 L1.5 metal sheets. Ultimate strength, relative elongation, final elongation, and uniform elongation are given as a function of scratch depth. The uniform and final elongations decreased 10-40% when 0.05 mm scratches were introduced. The ultimate tensile strength remained practically

UDC: 539.37 : 624.043

Card 1/2

ACC NR: AT6035120

constant. Further testing for the minimum bend radius was done on D16A-M, VAD23, D16A-T (naturally aged), OTCh-1, and VT-14 materials in 1.5 and 2.5 mm thicknesses with scratches ranging from 0.05 to 0.15 mm in depth as well as without scratches. The scratches were scribed on the tension side of the neutral axis. The relative minimum bend radius  $R/s$  is given as a function of scratch depth, where  $R$  is the notch radius (notch angle =  $60^\circ$ ) and  $s$  is the sheet thickness. The presence of scratches caused a sharp inhomogeneity in plastic flow in the notched zone, resulting in a premature fracture. Scratches of only 0.05 mm depth lowered  $R/s$  by 25-30%, depending on the material. The above results were deemed applicable to sheet metal operations where tensile deformation is present. The prevention of scratches and other surface defects is necessary to preclude premature failure. Orig. art. has: 11 figures, 1 formula.

SUB CODE: 13,11/

SUBM DATE: none/

ORIG REF: 007/

OTH REF: 003

Card 2/2

HUMAK, M. F.

J

Country : USSR  
Category: Soil Science Soil Biology

Abs Jour: RZhBiol., N° 14, 1958, No 63033

Author : Aleksandr vs. L.N.; Naydenova, O.L.; Shumilova, M.F.  
Inst : Leningrad Agricultural Institute  
Title : Dynamics of Group and Fractional Composition of Humus  
in the Yearly Cycle of the Soil-forming Process in  
Sod-podzolic Soils

Orig Pub: Zap. Leningr. s.-kh in-ta, 1956, vyp. 11, 106-111

Abstract: A three-year observation of the seasonal dynamics  
of the group composition of humus in cultivated sod-  
podzolic soils in the vicinity of the city of Pushkin  
in the Leningrad oblast' showed that during the  
spring-summer period intensive processes of forma-  
tion of humic acids occurred with a predominance of

Card : 1/3

J-13

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3

G. V. TAKA, M.D.; N. M. MIRKOVICH, M.M.

Some changes in the hemodynamics and gas exchange due to the use  
of a tetracyclic mixture in a serious form of thyrotoxic goiter. Trudy  
Lynn. KMJ 33:139-144 1964. (MIRA 18:3)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3"

KOLYUTSKAYA, O.D.; BUNYATYAN, A.A.; SHUMAKOVA, N.M.

Nitrous oxide in anesthesia. Trudy 1-go MMI 33:274-279 '64.  
(MIRA 18:3)

SHIARAKOV, F. I. I.

.6574

Tyettcovia, N. T. Ob Ambarn, Kh Klyeshchakh Altaysk Zashchity Rastjenii No. 1,  
1949, S. 83-99 bibliogr: 12 Nazv Gla Vnyeyshikh Artyeriy Oblasti Shyet U Kur,  
Gusyey I Utck (Anatnoekspyerim Isslyedovaniye) Uchyen Zapiski (Vologod Pyed  
In-T Im Molcova, T. V., 1948, S.3-28- Bibliogr: 62 Nazv  
XVIII Transport  
I. Obenchiye v c. resy

SC: LITOPIS NO. 38

SHUMAKOVA, F. I.

28501

Tyetyenkova, M. F. Khlyebnyy Klyeshchik V Altayskom Karye Trudy Alt Krayev Stantsii  
Zashchity Rasteniy, No. 1, 1949, S.101-07  
B. Kormovyyekulbtury Lugai Astobiishcaa

SG: LETOPIS NO. 33

SHUMAKOVA, F. I.

28568

Vryeditsii Lyutsyerny Na Altaye Trudy Alt. Krayev, Stantsii Zashchity Rastyeniy  
No. 1, 1949, s. 119-34 Bibliogr: Ionazv V. Tyekhichyeskiye Kulbtury Akadyemiya  
Nauk Uzbyekskoy SSR. Cbyazatyelbstva Uchyenykh Akadyemit Nauk U)SSR V Svyazi  
S. Pisvmenuchastnikov V Kuruitayekhlopkorotov Uzbyekistana Tovarishchu I V  
Stalinu- Sm 28675. Balyabu, N. K. Osyevooborotakh ,lya Croshayemykh Pochv  
Khlopkovykh Rayonov Sm 28477

SC: LETOPIS NC. 38

SHUMAKOVA, P.I.

In memory of Grigorii Makarovich Vinokurov (1886-1956). Ent.  
oboz. 37 no.4:947-949 '58. (MIRA 11:12)  
(Vinokurov, Grigorii Makarovich, 1886-1956)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3

30874. SHUMAKOVA, Ye. M. and KIRIENKO, F. G.

Selektsiya i semenovodstvo yarovoy pshenitsy. V so: Nauch. trudy Vsesoyoz. selekts.-genet. in-ta im. Lysenko. M., 1949, s. 144-167.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3"

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3

GRANOVSKY, M. M.

1900. Is a citizen of the United States. Went to New York  
Venezuela, vyp. 3, str. 1G-17

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3"

SHUMAKOVICH, YE. YE.

PA5/49T62

**USSR/Medicine - Sheep  
Medicine - Helminths and Helminthiasis**

Mar 48

"Therapy of Mulleriosis of Sheep," Ye. Ye. Shumakovich, Cand. Vet. Sci., All-Union Inst. of Helminthology, Acad. K. I. Skryabin, 3 pp

"Dok v-s Ak Selkhoz Nauk" No 3

Mullerius capillaris is tissue helminth of lungs of goats and sheep, widespread in many districts especially in wooded areas. Infestation in 8-9 year old sheep often reaches 100%. No treatment exists. Skryabin started work on problem in 1939, and reports his views on various preparations. Recommends in-

5/49T62

**USSR/Medicine - Sheep (Contd)**

Mar 48

jection of 1% aqueous solution of emetine hydrochloride. Submitted 20 Sep 47.

5/49T62

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3

1970. *Microtus longicaudus* schrenkii (Schrenk, 1858), nom. nascit. sub *M. longicaudus* (Schrenk, 1858).  
sp. coll. Dr. A. I. Balon. Altai, S. I.

**APPROVED FOR RELEASE: 08/23/2000**

CIA-RDP86-00513R001550210013-3"

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3

WILLIAM J. COHEN, SECRETARY OF DEFENSE, WASH., D.C.,

RE: "Protocol" of the Geneva Convention on the Laws of War concerning  
Captured Personnel and POWs, 12/12/1949.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210013-3"

SUMAKOVICH, Ye. Ye., RUDANOV, V. S., BURLAEVA, N. I.

"Experiments in the Fight Against Muelleriosis and Protostrengyloidiasis  
With the Use of Emetine Hydrochloride"  
Tr. Vses. In-ta Gel'mintologii, 1953, No 3, pp 190-194

Excellent results were obtained in the fight against helminthiasis with prophylactic methods after return of the animals from pasture. A number of sheep and goats with Muelleriosis and Protostrengyloidiasis were given doses of emetine hydrochloride in April. Between May and June no signs of the mollusks were found on the pasture land, nor was there any invasion of the larvae. From July to September infestation reappeared, but much less seriously than on the pasture where nontreated animals had been kept.  
(RZhBiol, No 3, Oct 54)

SO: Sum. 492, 12 May 55

SHUMAKOVICH, Ye. Ye.

USSR/ Medicine - Conferences

Card 1/1 Pub. 124 - 24/28

Authors : Shumakovich, Ye. Ye., Prof.

Title : Theory and practice of combatting helminthiasis

Periodical : Vest. AN SSSR 26/1, 101-102, Jan 1956

Abstract : Minutes are presented from the scientific session of the All-Union Society of Helminthologists held in Moscow (Oct. 18-22, 1955) and attended by more than five-hundred medical and veterinary doctors, biologists and phytopathologists where problems of combatting helminthiasis were discussed.

Institution : .....

Submitted : .....

SHUMAKOVICH, Ye.Ye., professor, doktor veterinarnykh nauk.

Current tasks in the control of helminthiasis in farm animals.  
Veterinariia 34 no.4:33-38 Ap '57. (MLRA 10:4)

1. Vsesoyuznyy institut gel'mintologii imeni akad. K. I. Skryabina.  
(Veterinary medicine) (Worms, Intestinal and parasitic)

YERSHOV, V.S., otv.red.; GNEDINA, M.P., red.; PETROV, A.M., red.;  
POD'YAPOL'SKAYA, V.P., red.; SHUMAKOVICH, Ye.Ye., red.;  
KARTASHEVA, N.M., red.; ANTONOV, N.M., khudozh.-tekhn.red.

[Works on helminthology; on Academician K.I.Skriabin's 80th  
birthday] Raboty po gel'mintologii, k 80-letiu akademika  
K.I.Skriabina. Moskva, Izd-vo M-va sel'.khoz.SSR. No.1.  
1959. 217 p. (MIRA 13:4)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni  
V.I.Lenina.  
(Worms, Intestinal and parasitic)

17(0)

SOV/30-59-4-37/51

AUTHORS: Spasskiy, A. A., Doctor of Biological Sciences  
Shumakovich, Ye. Ye., Doctor of Veterinary Sciences

TITLE: Tasks in the Fight Against Helminths (Zadachi bor'by s gel'mintozami)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 4, pp 123-124 (USSR)

ABSTRACT: The All-union Association of helminthologists held a Conference between December 8th and December 12th, 1958 which dealt with the problems of the fight against helminths in man, agricultural domestic animals and plants. About 150 reports were held and discussed. K. I. Skryabin reported on a new stage of the development of helminthological science and practice. I. V. Orlov explained the fight against trichinae in the USSR. Ye. Ye. Shumakovich spoke about prospects in the fight against the turn-sickness. Ye. S. Leykina reported on natural foci of multi-chamber echinococcosis in the Novosibirskaya oblast'. V. S. Yershov spoke about the immunization of domestic animals. V. I. Petrochenko reported on the breeding of poultry in the European part of the USSR and the (Soviet) Far East. O. I. Polyakova dealt in her report with the metabolism of helminths,

Card 1/2

Tasks in the Fight Against Helminths

SOV/30-59-4-37/51

N. P. Shikhobalova with the radiobiology of helminths, A. A. Spasskiy spoke about the arrangement of the ontogenesis of helminths in its individual periods, I. A. Baranovskaya with the nematodes of agricultural plants, Yu. Ya. Tendetnik on the use of predatory fungi in the fight against helminths. The representative of the Glavnoye upravleniye veterinarii Ministerstva sel'skogo khozyaystva SSSR (Main Administration of Veterinary Medicine of the Ministry of Agriculture of the USSR), S. A. Yakovlev spoke about the present stage in the fight against helminths in the USSR. On the stage of the fight against helminths in their countries the following foreign helminthologists gave a report: W. Stefanski, W. Michajlow (Poland), J. Hovorka, B. Rysavy (Czechoslovakia), A. Kotvald (?), T. Szabolcs (Hungary), A. Borchert (GDR), Ye. Dimitrova (Bulgaria), and G. Olteanu (Rumania). The Conference gave a clear evidence of the progress made in the field of helminthological research work. Successes were also achieved in connection with the working out of measures in the fight against helminths as well as in the field of phytohelminthology. The resolution of the Conference contains the most important tasks for the next years.

Card 2/2

SHUMAKOVICH, Ye.Ye.; SPASSKIY, A.A.

Scientific conference of the All-Union Society of Helminthologists.  
Izv.AN SSSR.Ser.biol. no.4:627-631 Jl-Ag '59. (MIR 12:9)  
(HELMINTHOLOGY--CONGRESSES)

SHUMAKOVICH, Ye.Ye.; PETROCHENKO, V.I.; MATEVOSYAN, Ye.M.

Scientific and practical assistance rendered to the collective farms  
of Stalingrad Province in organizing measures for the control of  
helminth infestations in farm animals. Trudy Gel'm.lab. 9:398-400 '59.  
(MIRA 13:3)

(Stalingrad Province--Veterinary parasitology)

SHUMAKOVICH, Ye.Ye., prof.; SHIL'NIKOV, V.I., kand.teterinarnykh nauk

Isolated raising of calves in stalls with outdoor runs is the  
method for prevention of dictyocaulosis. Veterinariia 37  
no.9:30-32 S '60. (MIRA 14:11)

1. Vsesoyuznyy institut gel'mintologii im. akad. K.I. Skryabina.  
(Lungworms)  
(Calves—Diseases and pests)

SHUMAKOVICH, YE. YE.

"Research into the epizootiology of helminthosis in animals and the use  
of results obtained in the development of anti-helminthic measures."

report to be submitted at the 17th World Veterinary Congress,  
Hanover, West Germany, 14-21 Aug 63.

LEYKINA, Ye.S.; MOZGOVOY, A.A.; SHUMAKOVICH, Ye.Ye.

Scientific Conference of the All-Union Society of Helminthologists. Izv. AN SSSR Ser. biol. 28 no.4:630-634 Jl-Ag'63  
(MIRA 16:11)

\*

SHUMAKOVICH, Ye.Ye., prof.

Epizootiology and prophylaxis of helminthiasis in animals. Veterinariia  
no.12:14-15 D '63. (MIRA 17:2)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.Skryabina.

SHUMAKOVICH, Ye.Ye., prof.; KUZNETSOV, N.I., kand. veter. nauk; NIKITIN, V.F.,  
kand. veter. nauk

Epizootiology of coenurosis and echinococcosis of farm animals  
in the lower and middle Volga Valley. Trudy VIGIS 10:82-91 '63.  
(MIR/ 17:2)

MOSKOVICH, A.A.; SHIMKOVICH, Ye.Ye.; KHOLOKOVA, V.I.; TUBLYGINA, Ye.S.

Scientific conference of the All-Union Society of Helminthologists.  
Izv. AN SSSR. Ser. biol. no.6:941-944 N-B '64.  
(MIRA 17:11)

ZAYFANOV V. N., candidate, A.N., aspirant; SHUMAKOVICH, Ye.Ye., prof., nauchnyy  
redaktor.

Immunization of cattle and sheep against dictyocaulosis.  
Veterinariia ZR no.7:51-52 Jl '65. (MIRA 18:9)

I. V. Uchrezhdenyy institut geologicheskoi imeni akademika Skryabina.

SHUMAKOVICH, Ye.Ye., prof.; SCHIPATROV, G.V., kand. veter. nauk

Prophylaxis of helminthiases under various cattle keeping  
conditions. Veterinariia 42 no.8:62-63 Ag '65.  
(MIRA 18:11)

1. Vsesoyuznyy institut gel'mintologii imeni akademika  
Skryabina.

SHUMAKOVICH, Ye.Ye., prof.

Russian nomenclature of helminths and helminthiases. Trudy  
VIGIS 11:175-183 '64. (MIRA 18:12)

SHUMAN, A.K.; DUNETS, G.I.

Concerning A.I. Safronov's article "Mobile high-voltage laboratories."  
Prom. energ. 18 no.8:59-60 Ag '63. (MIRA 16:9)

1. Promenergogaz (for Shuman). 2. Upravleniye energokhozyaystva  
Volgogradskogo soveta narodnogo khozyaystva (for Dunets).  
(Electric laboratories)  
(Safronov, A.I.)

S/021/61/000/005/005/012  
D215/D304

AUTHORS: Kukhtenko, O.I., and Shuman, B.M.

TITLE: Invariance conditions for linear systems with variable parameters

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 5,  
1961, 608 - 611

TEXT: The present article is based on the earlier research of O.I. Kukhtenko (Ref. 1: DAN URSR, 434, 1961) and is a continuation of it. In this paper the author considers the case where the controlled members and the control systems are both described by equations with variable coefficients. They are as follows:

$$\begin{aligned} a_{11}(p, t)x_1 + a_{13}(p, t)x_3 &= F(t), \quad a_{21}(p, t)x_1 + a_{22}(p, t)x_2 + \\ &+ a_{23}(p, t)x_3 = 0, \quad a_{32}(p, t)x_2 + a_{33}(p, t)x_3 = 0 \end{aligned} \quad (1)$$

Card 1/3

S/021/61/000/005/005/012

D215/D304

Invariance conditions for ...

where  $a_{ij}(p, t)$  are differential operators of not higher than the second order, i.e.

$$a_{ij}(p, t) = m_{ij}(t)p^2 + l_{ij}(t)p + k_{ij}(t); \quad (2)$$

Any notation and formulae which the author uses are explained in (Ref. 1: Op.cit.). Eqs. (5) and (12) from (Ref. 1:Op.cit.) are valid for variable coefficients and they are presented again

$$u_1(p, t) * a_{22}(p, t) = a_{32}(p, t), \quad (3)$$

$$u_1(p, t) * a_{23}(p, t) = a_{33}(p, t). \quad (4)$$

Each of the functions  $a_{22}$ ,  $a_{23}$ ,  $a_{32}$ ,  $a_{33}$  could be a polynomial of the second order at most. Solutions of these equations are obtained by the comparison of the coefficients of  $p$  of the same order, on both sides of Eqs. (3) and (4). The author considers three subcases, which are most important in practical applications. Operators  $a_{22}$ ,  $a_{23}$ ,  $a_{32}$ ,  $a_{33}$  are of the same order - either first or second.

Card 2/3

S/021/01/000/005/005/012  
D215/D304

Invariance conditions for ...

Operators  $a_{22}$ ,  $a_{23}$  are of the first order when  $a_{32}$ ,  $a_{33}$  are of the second order. Using the same method of comparison of coefficients he obtains new conditions of invariance. Operators  $a_{23}$ ,  $a_{22}$  are of zero order and operators  $a_{33}$ ,  $a_{32}$  of the second order. Conditions of invariance obtained in (Ref. 1: Op.cit.) are the special case of these obtained in present paper, when one substitutes  $k'_{23} = k'_{22} = k'_{33} = k'_{22} = 0$  and  $m_{23} = m_{22} = 0$ . All other combinations for coefficients  $a_{22}$ , ...  $a_{33}$  would be examined analogously. There are 2 Soviet-bloc references.

ASSOCIATION: Kyyivs'kyy instytut tsyvil'noho povitoyanoho flotu  
(Kyiv Institute of Civil Aviation)

PRESENTED: G.M. Savios, Member of AS UkrSSR

SUBMITTED: July 23, 1960

Card 5/3

ACC NR: AP7004902

(N)

SOURCE CODE: UR/0109/66/011/012/2217/2219

AUTHOR: Chelnokov, V. Ye.; Shuman, V. B.; Yakivchik, N. I.

ORG: none

TITLE: Study of the switching process of silicon p-n-p-n structures

SOURCE: Radiotekhnika i elektronika, v. 11, no. 12, 1966, 2217-2219

TOPIC TAGS: silicon semiconductor, semiconductor device, PN JUNCTION, SILICON SEMICONDUCTOR, PN NEHCTION, PULSE AMPLITUDE, PULSE DURATION, MODULATION

ABSTRACT: The switching-on time of p-n-p-n structures with large surface areas ( $\sim 3 \text{ cm}^2$ ) made by doping n-type silicon plates (diameter, 2.5 mm) with aluminum and phosphorus is studied experimentally. This time was divided into three parts: delay time  $\tau_e$  required for the anode voltage to decrease to 0.9  $V_A$  (where  $V_A$  is applied voltage to the anode); front time  $\tau_f$  required for the anode voltage to fall from 0.9  $V_A$  to 0.1  $V_A$ ; and the settling time  $\tau_s$  required for the anode voltage to drop from 0.1  $V_A$  to a value determined by the semiconductor structure. These times were studied as functions of amplitudes and time durations of square-wave pulses applied to the anode and control base ( $V_A$  and  $V_C$ ) and of the hole lifetime in the thick base. The square wave pulses  $V_A$  had amplitudes between 20 and 125 v, durations of 50 to 150  $\mu\text{sec}$ , and a frequency of 50 cps. The  $V_C$  pulses had the same frequency as those applied to the anode, but were shifted in time; their current and time duration was varied between 10 and 300 ma and 1 and 125  $\mu\text{sec}$ . A resistive 6-ohm load was used in

Card 1/2

UDC: 539.2

ACC NR: AP7004902

the study. In order to decrease the switch-on time of the p-n-p-n structure (i.e.,  $\tau_f + \tau_s$ ) it is necessary to increase the hole lifetime in the thick base of the structure. Orig. art. has: 4 figures. [IV]

SUB CODE: 09/ SUBM DATE: 08May65/ OTH REF: 001/ SOV REF: 003

Card 2/2

24.7060 (1137,1144, 1365)

30418  
S/058/61/000/009/040/050  
A001/A101

AUTHORS: Pilat, I.M., Shuman, V.B.

TITLE: Magnetic susceptibility of intermetallic compounds of CdSb with ad-mixture of In

PERIODICAL: Referativnyy zhurnal. Fizika, no. 9, 1961, 228, abstract 9E410  
("Nauchn. yezhegodnik za 1957. Chernovitsk. un-t", Chernovtsy,  
1958, 478 - 479)

TEXT: The temperature dependence of magnetic susceptibility  $\chi$  of the following compounds was studied in the temperature range from 20 to 220°C; 1) CdSb + 0.02% In, 2) CdSb + 0.1% In, and 3) CdSb + 1% In. All investigated specimens are diamagnetic, and diamagnetism grows with temperature. The introduction of 0.02% In changes the sign of conductivity, but  $\chi$  does not change, because the concentration of current carriers remains almost the same. It is established that the main contribution into magnetic susceptibility at room temperature is provided by CdSb lattice. With the rise of In concentration in the specimen, the growth of  $\chi$  with temperature increases. Values of activation

Card 1/2

30418

S/058/61/000/009/040/050  
A001/A101

Magnetic susceptibility ...

energy  $\Delta E$ , calculated from electric and magnetic measurements in the temperature range up to 100°C, are equal, which points to the effect of the growth of current carrier concentration on increase of  $\chi$ . Effective masses of carriers are estimated:  $m^*_p < 0.576 m_0$  and  $m^*_n < 0.576 m_0$ , where  $m_0$  is the [redacted] value of free electron.

N. Smol'kov

[Abstracter's note: Complete translation]

Card 2/2

PILAT, I.M.; ISKRA, V.D.; SHUMAN, V.B.

Electric properties of the intermetallic compounds CdSb with  
indium impurities. Fiz. tver. tela 1 no.3:393-396 Mr '59.  
(MIRA 12:5)

1.Chernovitskiy gosudarstvennyy universitet.  
(Cadmium antimonide--Electric properties)

GREKHOV, I.V.; LINIYCHUK, I.A.; TUCHKEVICH, V.M.; CHELNOKOV, V.Ye.,  
SHUMAN, V.B.; YAKIVCHIK, N.I.

Some applications of regulated silicon power rectifiers.  
Elektrichesvo no.2:76-77 F '65. (MIRA 18:3)

L 30991-66 EWP(e)/EWT(m)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b) IJP(c) JD  
ACC NR: AF6002888 SOURCE CODE: UR/0286/65/000/024/0045/0045

INVENTOR: Grekov, I. V.; Linlychuk, I. A.; Lebedeva, L. V.; Tuchkevich, V. M.  
Chelnokov, V. Ye.; Shuman, V. B.; Yakivchik, N. I.

ORG: none

TITLE: Method of creating a source of diffusion of aluminum in silicon. Class 21,  
No. 176989 [announced by the Physical Engineering Institute im. A.F. Ioffe, AN SSSR  
(Fiziko-tehnicheskij institut AN SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 45

TOPIC TAGS: aluminum, diffusion, aluminum diffusion, junction, pnp junction, npnnp junction, pnn junction, junction forming

ABSTRACT: This Author Certificate introduces a method of forming an aluminum source for the diffusion of aluminum in silicon in an oxidizing atmosphere such as air. To simplify the technique and accelerate the diffusion, aluminum in the form of  $\text{Al}(\text{NO}_3)_3$  solution or of a mixture of aluminum-oxide powder with powder oxides of metals such as tungsten, titanium, or tantalum is deposited by any well-known method on the surface of silicon plates. In a variant of the above method, in order to obtain structures of the types p-n-p or n-p-n-p-n, the surface of silicon plate is first coated with a boron or phosphorus compound and subjected to heat treatment. In a further variant of the first and second methods, in order to form semiconducting structures of such

Card 1/2

UDC: 539.121.72.002.2: 621.382

I 30991-66

ACC NR: AP6002888

types as p-n-n+, one of the sides of the silicon plate is coated with an alcoholic solution of aluminum, boron, and nickel compounds, and the other side is coated with a solution of orthophosphoric acid in alcohol, followed by a heat treatment. [ND]

SUB CODE: 20,09 SUBM DATE: 05Mar64/ ATD PRESS: 4189

Card 2/2 LC

ACC NR: AP7006046

SOURCE CODE: UR/0109/66/011/010/1856/1864

AUTHOR: Grekhov, I. V.; Liniychuk, I. A.; Chelnokov, V. Ye.; Shuman, V. B.

ORG: none

TITLE: Influence of space charge layer on volt-ampere characteristic of multi-stratal diffusion structures in silicon

SOURCE: Radiotekhnika i elektronika, v. 11, no. 10, 1966, 1856-1864

TOPIC TAGS: volt ampere characteristic, pn junction

ABSTRACT: Results are presented from calculation of the dependence of width of space charge layer in diffusion silicon pn junctions on the applied voltage for certain practically interesting cases (with low additive concentration gradient in junction). Calculations were performed on the BESM-2 computer. Experimental data are presented on the investigation of the volt-ampere characteristic of diffusion p-n junctions; the data is compared with calculated data. Calculations and experiment are in good agreement. Thus, the calculated dependences can be used in planning diffusion multi-stratal structures. The authors thank D. I. Kurakina for help in the experimental work. Orig. art. has: 9 figures and 11 formulas. [JPRS: 39,568]

SUB CODE: 09

Card 1/1

09270840

L 38192-66 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG  
ACC NR: AP6023613 SOURCE CODE: UR/0105/66/000/007/0056/0059

AUTHOR: Volle, V. M.; Grekov, I. V.; Kryukova, N. N.; Tuchkevich, V. M.  
Chelnokov, V. Ye.; Shuman, V. B.; Yakivchik, N. I.

ORG: Leningrad Physicotechnical Institute im. Ioffe, AN SSSR (Leningradskiy fiziko-tekhnicheskiy institut. AN SSSR)

TITLE: VKDL-type diffused silicon avalanche power rectifiers

SOURCE: Elektrichestvo, no. 7, 1966, 56-59

TOPIC TAGS: semiconductor rectifier, silicon controlled rectifier

ABSTRACT: The development is reported of new types of diffused silicon power rectifiers. The rectifiers, which can be operated safely under high peak inverse voltages, differ from conventional diffused silicon rectifiers in that, due to special preparation of the p-n junction, the possibility of local electric breakdown at the intersection of the p-n junction with the surface is eliminated. Therefore, under peak inverse voltages, the process of avalanche breakdown takes place in the central section of the junction, while large power is dissipated in the inverse direction. In 1964, the Leningrad Physicotechnical Institute im. Ioffe, AS USSR, in cooperation with the "Elektrovýpravimel" Plant developed a series of such rectifiers bearing the designations VKDL-100, VKDL-200 and VKDL-350 for 100, 200, and 350 amp, respectively, and an 800-v operating voltage. The rectifying element of these devices is in the

Card 1/3

UDC: 621.382.3

45  
211  
15

ACC MM AP6023613

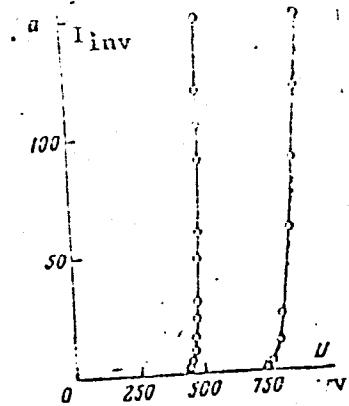


Fig. 1. Voltage-inverse current characteristic of the VKDL rectifiers

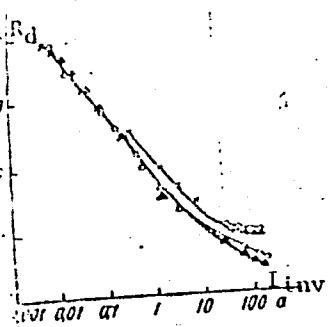


Fig. 2. Dependence of the dynamic resistance of the VKDL rectifiers on the inverse current

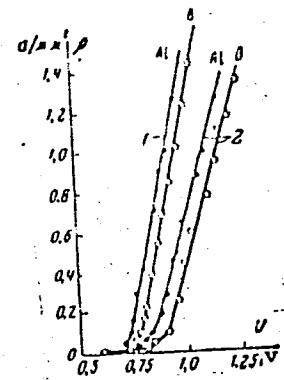


Fig. 3. Voltage-forward current characteristic of p-n junctions

form of a 25-mm silicon plate with a p-n-n<sup>+</sup> type conductivity. Two thermally compensating tungsten disks are pressed against the plate. A method of planar guard ring construction, described elsewhere (Haitz, R. M., A. Goetzberger, R. M. Scarlett,

Card 2/3

SHUMAN, V.F.

Electric saw for cutting ice. Rats. i izobr. predl. v stroi. no.56:  
17-19 '53. (MIRA 9:7)  
(Saws) (Pipelines--Cold weather conditions)

SHUMAN, Z.I., inzh.

Repair of damaged insulation of welding cables. Sudostroenie  
25 no.12:58 D '59. (MIRA 13:4)  
(Electric welding--Equipment and supplies)

SHUMANIN, A. L.

New tenon-cutting machine. Mashinostroitel' no.11:30 N '60.  
(MIRA 13:10)  
(Woodworking machinery)

SHMILKOV, I

"Practical tables for master classification of trees" (,139) SPESHO STOPLANSTVO  
(Upravlenie Na Gorskote Strojoustvo Kuz. Ministerstva Suvet) Sofija Vol 10 No 1 Jan 1954

SO: East European Acquisitions List Vol 2 No 7 Aug 1954

L 34160-65 EPP(c) EPP(n)-2/EWC(j)/EWA(h)/EWP(j)/EWT(m)/EWA(l) PC-4/Pr-4/  
Pu-4/Feb AG/RM

ACCESSION NR: AP5008234

S/0286/65/000/005/0129/0129

AUTHOR: Dogadkin, B. A.; Tutorskiy, I. A.; Markov, V. V.; Gol'danskiy, V. I.;  
Yegorov, Ye. V.; Rapoport, V. B.; Shumanov, L. A.

TITLE: A method for the preparation of radiation-resistant coatings.<sup>19</sup> Class 39,  
No. 151801<sup>b</sup>

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 129

TOPIC TAGS: polymer coating, radiation damage, polymer solution, polyisoprene  
rubber

ABSTRACT: This Author Certificate describes the use of a 40% solution of cyclized  
polyisoprene rubber in xylene and white spirit for producing radiation-resistant<sup>c</sup>  
coatings. [VS]

ASSOCIATION: none

SUBMITTED: 30Oct61

ENCL: 00

SUB CODE: MT, LB

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3212

Card 1/1

SHUMANOV, S.

Greater authority for chiefs of municipal departments of the  
State Banks. Den. i kred. 13 no. 1:46-47 Ja '55. (MIRA 8:2)  
(Banks and banking)

L 00821-67

EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) AT/JD/JG/GD

ACC NR: AT6022651

SOURCE CODE: UR/0000/66/000/000/0101/0108

AUTHOR: Chekalin, E. K.; Shumanov, V. S.

ORG: none

TITLE: Discharge of a metal plasma jet into a vacuum

SOURCE: AN SSSR. Energeticheskiy institut. Issledovaniya po fizicheskoy gazodinamike (Studies of physical gas dynamics). Moscow, Izd-vo Nauka, 1966, 101-108

TOPIC TAGS: plasma jet, alkali metal, plasma temperature

ABSTRACT: In order to obtain streams of a metal plasma, use was made of the evaporation of the substance of the electrodes in a pulsed high-current discharge, followed by electrodynamic acceleration of the plasma formed. Analysis of the emission spectrum of the plasma in the visible region by means of an ISP-51 spectrograph showed the presence of the lines of the alkali metal employed, two hydrogen lines ( $H_{\alpha}$  and  $H_{\beta}$ ), and two lines of copper and sodium. Oscillograms of the glow intensity of the various spectral emission lines showed the plasma stream to be made up of individual plasmoids corresponding to the periodic ejections of plasma from the plasma gun. Some time-averaged parameters of the plasma streams of the alkali metal were measured: the concentration of ions  $n_i$  was found to be  $4.0 \times 10^{14}$  particles/cm<sup>3</sup>, and the average temperature of the plasma stream  $T_i = (19 \pm 5) \times 10^3$  °K. The average pressure in the plasma stream was found to be 1.6 mm Hg. It is shown that the averaging of the plasma parame-

Card 1/2

L 00821-67

ACC NR: AT6022651

O

ters over a time interval of 100  $\mu$ sec is fully justified: the experimentally determined average values of the plasma parameters should then be close to the true values. The study of the discharge of a metal plasma into a vacuum shows that such plasma jets can be used for investigating processes of heat transfer from the plasma stream to a solid wall and for various aerodynamic studies in plasmas. Orig. art. has: 8 figures and 6 formulas.

SUB CODE: 20 / SUBM DATE: None / ORIG REF: 002

hs

card 2/2

L 00820-67 EWT(1) IJP(c) AT/GD

ACC NR: AT6022652

SOURCE CODE: UR/0000/66/000/000/0109/0118

AUTHOR: Chekalin, E. K.; Shumanov, V. S.

ORG: none

TITLE: Electric explosion of wire in air and vacuum

SOURCE: AN SSSR. Energeticheskiy institut. Issledovaniya po fizicheskoy gazodinamike (Studies of physical gas dynamics). Moscow, Izd-vo Nauka, 1966, 109-118

TOPIC TAGS: moving plasma, exploding wire

ABSTRACT: Experiments on the electric explosion of copper wire in air and vacuum were conducted in order to observe the differences in the explosive processes in these two media, and appreciable differences were noted. Spectroscopic studies of time-resolved plasma radiation were made, and the volt-ampere characteristics of the discharge in the initial stage of the explosion were determined. Experiments were also performed in order to study the process of expansion of the plasma cloud in a vacuum, and some plasma parameters were measured. It was found that the plasma expansion processes are less stable in a vacuum than in air. It is concluded that the explosion of the wire in a vacuum, despite a substantial complexity of the phenomenon as a whole, permits the study of a series of the physical properties of a dense plasma expanding in a vacuum. Orig. art. has: 8 figures and 3 formulas.

11/13

SUB CODE: ~~202~~ SUBM DATE: None/ ORIG REF: 001/ OTH REF: 003  
Card 1/1 hs

57  
B+)

SHUMANOVA, A. A.; SOKOLOV, B.S.; CHERKASHENINA, Ye.F.; GARSKOVA, K.A.; CHULKOV, M.P.; BORISENOK, V.G.; RAIMOVA, S.S.; KULIK, O.A.; UDALOVA, L.I.; KAZACHKOV, S.S., otv. red.; ZHDANOVA, L.P., red.

[Agroclimatic manual on Omsk Province] Agroklimatushki spravochnik po Omskoi oblasti. Leningrad, Gidrometeoizdat, 1959. 227 p. (MIRA 17:7)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. Omskoye upravleniye. 2. Gidrometeorologicheskaya observatoriya Omskogo upravleniya gidrometeorologicheskoy sluzhby (for all except Kazachkov, Zhdanova).

SHUMANOVA, T.I.; UTESHEV, N.S., kand.med.nauk

Laryngeal injuries. Vest.khir. no.10:49-52 '61.

(MIPA 14:10)

1. Iz 3-y khirurgicheskoy kliniki (rukoved. - prof. D.A. Arapov)  
Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy  
pomoshchi im. N.V. Sklifosovskogo (dir. - zasluzh. vrach USSR  
M.M. Tarasov).

(LARYNX--WOUNDS AND INJURIES)

SHUMANSKAYA, M.G.

Vegetative hybrids from the callus. Agrobiologija no.1:67-75 Ja-F  
'58. (MIRA 1I:2)

1. Eksperimental'naya baza "Gorki Leninskiye" Instituta genetiki AN  
SSSR.  
(Tomato breeding) (Hybridization, Vegetable) (Grafting)

AVAKYAN, A.A.; SHUMANSKAYA, M.G.

Planting together late and early varieties of corn. Agrobiologiiia  
no.2:283-287 Mr=Ap '62. (MIRA 15:4)  
(Corn (Maize)--Varieties)

AVAKYAN, A.A.; SHUMANSKAYA, M.G.

Biological nature of the process of fertilization. Agrobiologija  
no.5:643-651 S-0'53. (MIRA 17:5)

1. Eksperimental'naya instituta genetiki AN SSSR, "Gorki  
Leninskiye", Moskovskaya oblast'.

SHUMANSKA/ N.A.; VURBANOVA, Tsv. [translator]

Grading of pupils in biology. Biol i khim 4 no.6:19-22 '62.

1. Lipetski institut za usuvurshenstvuvane na uchitelite (for Shumanska).

SHUMANSKAYA, N.A.

Measuring the knowledge of students in biology. Biol.v shkole  
no.4:25-28 Jl-Ag '62. (MIRA 15:12)

1. Lipetskiy institut usovershenstvovaniya uchiteley.  
(Biology---Study and teaching)

SHUMANSKI, M., inzh.; ISTATKOV, St., inzh.

Methods in studying and computing basic parameters of  
metallic anchor supports. Min delo 18 no. 11: 16-20  
N '63.

1. "Niproruda" (for Shumanski).
2. Minro-geologhki institut (for Istatkov).

SHUMANSKI, Metodi, inzh.; TOTEV, Salvko, inzh.; NIKOLAEV, Nikolai,  
inzh.

New technology in strengthening mine and tunnel constructions  
with steel concrete anchors. Tekhnika Bulg 13 no. 3:19-21  
'64.

82962

S/142/60/003/002/002/022

E192/E382

9.1300

AUTHORS: Kovalenko, Ye.S. and Shumanskiy, V.I.

TITLE: In-phase Waves in a Periodic Waveguide of Rectangular Cross-section

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1960, Vol. 3, No. 2, pp 153 - 167

TEXT: The propagation of in-phase waves in periodic waveguides<sup>25</sup> of rectangular cross-section has been considered by several authors (Refs. 1, 2 and 3). It was found, however, that the results obtained by those authors are in general incorrect. The system considered in this work is illustrated in Fig. 1. It is assumed that it is necessary to determine the field and the propagation constant for the waveguide. The field to be determined is represented by means of a Hertz vector  $\Pi_{mx}^s$ . Consequently, for the interaction space, the particular solution which satisfies the boundary conditions at  $x = \pm a/2$  is given by:

$$\Pi_{mx}^s = A_s \cos \frac{\pi}{a} x \sin k_y^s e^{j\beta_s z} \quad (1)$$

For the resonator space it is given by:

$$\Pi_{mx}^s = B_s \cos \frac{\pi}{a} x \cos k_o^s \left( \frac{b}{2} - y \right) \cos \frac{s\pi}{d} (z - t) \quad (2)$$

Card1/4

82962  
S/142/60/005/002/002/022

E192/E382

In-phase Waves in a Periodic Waveguide of Rectangular Cross-section

Now the field components in the interaction space are given by Eqs. (3) and for the resonator space they are expressed by Eqs. (4). At the boundary between the interaction space and the resonator space the tangential components of the field vectors are equal. This is expressed by Eqs. (5), (6) and (7). From these expressions it is found that the constants  $A_s$  can be determined from a homogeneous system of equations:

$$\sum_{s=-\infty}^{+\infty} \varphi_{se} X_s = 0 \quad (9)$$

where  $X_s$  is defined by Eq. (8) and  $\varphi_{se}$  is given by Eq. (9a). The scattering equation which determines the propagation constant  $\beta_0$  is expressed by:

$$|\varphi_{se}| = 0 \quad (10)$$

Card 2/4

82962

S/142/60/003/002/002/022

E192/E382

In-phase Waves in a Periodic Waveguide of Rectangular Cross-section

Eqs. (9) and (10) determining the in-phase LE wave in the waveguide. It is now assumed that the field can be expressed by means of a single Hertz vector  $\vec{H}_{ex}$ . Now the expressions for the constants  $A_s$  and  $B_s$  are given by Eqs. (11). The equations for determining  $A_s$  are now in the form of Eqs. (17), where  $Y_s$  is defined by Eq. (16). The scattering equation is given by Eq. (18). Eqs (17) and (18) determine the in-phase LM waves in the periodic waveguide. It is seen, therefore, that by employing the two Hertz vectors it is possible to construct two types of in-phase waves, namely, waves of LE and LM types. It is not clear, however, whether these two types represent all the possible in-phase waves. The problem is investigated by considering other Hertz vectors and it is shown that the LE and LM waves are the only possible in-phase waves in the periodic waveguide. The scattering equation for LE waves is discussed in some detail; it is shown that the first approximation for Eq.(10)

Card 3/4

82962

S/142/60/003/002/002/022

E192/E382

In-phase Waves in a Periodic Waveguide of Rectangular Cross-section

(for  $d = D$ ) is in the form of Eq. (36). By solving Eq. (36) it is possible to obtain the dependence of the delay coefficients  $\gamma$  on various geometric parameters of the waveguide. Eq. (36) can be solved graphically and  $\gamma$  is plotted as a function of  $\epsilon$  in Fig. 3. (where  $\epsilon = kh$ ). Further graphs of  $\gamma$  against  $\epsilon$  are shown in Figs. 4. The second approximation of the scattering equation is also considered and the results are shown in Fig. 5, where the dashed curves show the first approximation and the "solid" curves represent the more accurate values. The authors express their indebtedness to their collaborators at the Tomsk Polytechnical Institute for their constant interest in this work and for discussing the results. There are 5 figures and 6 references: 1 English, 1 German and 4 Soviet. ✓

ASSOCIATION: Nauchnyy seminar sektora SVCh NII yadernoy fiziki, elektroniki i avtomatiki pri Tomskom politekhnicheskem institute im. S.M. Kirova  
(Scientific Seminar of the Section of SVCh NII for Nuclear Physics, Electronics and Automation of Tomsk Polytechnical Institute imeni S.M. Kirov)

SUBMITTED: June 4, 1959, initially; July 24, 1959 after revision.  
Card 4/4

SHUMANYUK, Andrey Petrovich

N/5  
631.42  
.S51

Biologiya Drevesnykh I Kustarnikovykh Porod SSSR; Posobiye Dlya  
Sredneyshkoly Biology of Trees and Shrubs of the USSR; Textbook for  
Secondary Schools Moskva, Uchpedgiz, 1957.

331 P. Illus., Diagrs., Maps, Tables.

"Literatura": P. 320-322

SHUMARA, O.A., aspirant

Pyrophyllite from secondary quartzites of the Yakkabag Mountains  
(southern Uzbekistan). Izv.vys.ucheb.zav.; geol. i razv. 8 no.1:  
55-57 Ja '65. (MIRA 18:3)

1. Rostovskiy gosudarstvennyy universitet.

SHUMARIN, Petr Mikhaylovich, kadrovyy leningradskiy stroitel', brigadir;  
BORSHCHEVSKAYA, S.I., red.; POL'SKAYA, R.G., tekhn. red.

[Comfortable and warm apartments for the people of Leningrad]  
Blagoustroemmye telye kvartiry - leningradtsam. Leningrad,  
Lenindat, 1960. 66 p.  
(MIRA 15:3)

1. Brigada sanitarnykh tekhnikov v UNR-525 tresta "Santekhmontazh-62"  
Glavnogo Leningradskogo upravleniya po zhilishchnomu i grazhdanskому stroitel'stvu (for Shumarin).  
(Leningrad—Plumbing)

FELODIN, V. SHUMIN, V.

Training specialist, Int. trade, 43 no.11:59-61 N 165°  
(MIR: 1812)

1. Tepikhin - Strelkovskoy svetshkoly (Per Afinegau).

*Soviet Textile Chem* 8/1  
USSR /Chemical Technology. Chemical Products  
and Their Application

I-19

Dyeing and chemical treatment of textiles

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32200

Author : Yushkov N.A., Sladkopevtseva G. Ye., Shubina N.A.,  
Shumarina A.V.

Title : Decreasing the Expenditure of Sodium Sulfide in  
Dyeing Cotton.

Orig Pub: Tekstil'naya prom-st', 1956, No 7, 37-39

Abstract: The formulas for dyeing cotton with sulfur dyes  
(D) have been revised in order to decrease the  
expenditure of D and Na<sub>2</sub>S. The optimal amounts  
of Na<sub>2</sub>S have been determined for dyeing with  
Sulfur Black, Brown Zh, Blue Z and their mixtures,

Card 1/3

USSR /Chemical Technology. Chemical Products  
and Their Application

I-19

Dyeing and chemical treatment of textiles

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32200

in continuous operation apparatus and centrifugal apparatus, under conditions approximating the full-scale operations. It was found that the dosage of  $\text{Na}_2\text{S}$  is determined by its concentration (in g/liter) in the dye bath. This concentration is apparently about the same with the different D and amounts to approximately 4-6 g/liter of 100%  $\text{Na}_2\text{S}$ . It does not depend on the concentration of the D, within the range of the usual concentrations of industrial dye baths (10-20 g/liter). The alkali content, with a concentration of  $\text{Na}_2\text{S}$  of 4-5 g/liter, must be not less than 2 g/liter NaOH (100%). For

Card 2/3

USSR /Chemical Technology. Chemical Products  
and Their Application

I-19

Dyeing and chemical treatment of textiles

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32200

continuous dyeing apparatus it is not expedient  
to use NaCl with a content of thiosulfates, in  
the dye bath, amounting to 25-30 g/liter. The  
new formulas increase exhaustion of the D, de-  
crease its losses during rinsing and, conse-  
quently, result in large savings (about 30%) of  
D and Na<sub>2</sub>S.

Card 3/3